Title Use of calcium lactate to improve structure of "Flor de Invierno" fresh-cut pears
Author L. Alandes, I. Pérez-Munuera, E. Llorca, A. Quiles and I. Hernando
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Abstract

The effect of calcium lactate on the structure (determined by microscopy), texture (penetration test), pectinmethylesterase activity and polygalacturonase activity of fresh-cut "Flor de Invierno" pears stored for 3 weeks at 4 °C was studied. The results showed that calcium lactate reinforced the structure of the fruit maintaining the fibrilar packing in the cell walls and the cell-to-cell contacts. This reinforcement counteracted the increase of both pectinmethylesterase and polygalacturonase activities. These results were reflected at a macroscopic level in an improvement of the texture of the calcium-treated pears. Calcium lactate could therefore be used to improve the structural integrity of fresh-cut "Flor de Invierno" pears.